

**EXPEDITED PROCESSING***In the Claims:*

Please cancel claim 25 and 33. Please amend claims 24, 31 and 53 as indicated below:

24. (Three Times Amended) A method of marketing telephone lines to customers, comprising:

speed pre-qualifying a plurality of customer lines from one-ended electrical measurements made by a test unit switchably connected to the plurality of customer lines, the speed pre-qualifying including classifying the lines for at least high speed digital service or low speed digital service; and

selectively offering the high-speed service to at least a portion of the customers having lines qualified to support high-speed digital service;

wherein each act of speed qualifying comprises:

measuring electrical properties of one of the lines from the central location;

identifying a line model for the one of the lines from the electrical properties;

identifying a modem model for use with the one of the lines, the modem model providing data rates for the selected modem; and

predicting a data rate for the one of the lines when operated with the selected modem by combining the line and modem models.

31. (Three Times Amended) A system for characterizing performance of customer lines for data transmission, comprising:

a computer;

a telephony switch coupled to a portion of the lines and adapted to connect the portion to a network, to perform one-ended electrical measurements on the portion, and to transmit the measurements to the computer;

a measurement unit coupled to the switch and computer, the unit to make the measurements on a selected line at a lower frequency in response to receiving a command

**EXPEDITED PROCESSING**

Sub  
E26

9 from the computer, the computer to predict data rates at a higher frequency for the  
10 selected line from the measurements, the computer being further adapted to:  
11 predict whether the selected line is disqualified for data transmission from the  
12 measurements thereon;  
13 wherein:  
14 \_\_\_\_\_the computer is adapted to determine a frequency dependent attenuation  
15 from the measurements; and  
16 the computer is adapted to command the measurement unit to order  
17 measurements on proxy lines and to predict data rates for a portion of the customer lines  
18 by using the measurements on the proxy lines.

E3

1 53. (Four Times Amended) A method of detecting a bridged tap in a customer line,  
2 comprising:  
3 making one-ended electrical measurements over a range of frequencies on  
4 the customer line;  
5 determining one or more admittances as a function of frequency of the  
6 customer line from the measurements; and  
7 detecting that the customer line has a bridged tap in response to finding a  
8 signature of a bridged tap in the one or more the ratio of the imaginary part to the real part  
9 of a derivative of admittances as a function of frequency exceeds a threshold.

E4

1 57. (Twice Amended) The method of claim 53, ~~further comprising~~ wherein detecting  
2 comprises:  
3 determining whether a ratio of imaginary and real parts of a frequency  
4 derivative of one of the one or more admittances has a peak; and  
5 wherein the determining is based on finding an above threshold peak in the  
6 ratio.